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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/881,283	06/14/2001	Robert J. Crowley	BSC-031CN	7430

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EXAMINER

LIN, JEOYUH

ART UNIT	PAPER NUMBER
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3737

DATE MAILED: 02/26/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/881,283

Applicant(s)

CROWLEY, ROBERT J.

Examiner

Jeoyuh Lin

Art Unit

3737

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 14 June 2001.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-24, 26-32 and 44-88 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1, 11, 14-16, 20-24, 26-32, 44-53, 57-64, 66-74, 80 and 82-88 is/are rejected.
- 7) ☒ Claim(s) 2-10, 12, 13, 17-19, 54-56, 65, 75-79 and 81 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 3.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

DETAILED ACTION

Double Patenting

1. Claim 1 is rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1 and 11 of U.S. Patent No. 6,289,229 B1. Although the conflicting claims are not identical, they are not patentably distinct from each other because claim 1 of the instant application is a general broadening of the patented claims. Both the application claim and the patent claims include an excitation source, a probe, a detector, and the arrangement of the said structures around an area of interest, the inclusion of a housing in the application claim being old and well known in the art. While the patent claims fail to claim an excitation source that generates radiation, it is well known in the art of optical imaging to one having ordinary skills in the art at the time the invention was made that optical imaging requires a radiation exciter source to illuminate tissue. Also, while the application claims fails to include ink in probe and a body-insertable device including a lumen, one of ordinary skill in the art would still be able to read the invention as defined by the patent into the broader application claim.

Claim Rejections - 35 USC § 112

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

-Claims 45-47, 49-53, 64, 66, 68, 69-74, 82-86, and 88 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claims 45-47, 49-53, 64, 66, 68, and 69-72 82-86, and 88 are structural claims that are dependent on a method claim, and fail to contain any method step.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in-

(1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effect under this subsection of a national application published under section 122(b) only if the international application designating the United States was published under Article 21(2)(a) of such treaty in the English language; or
(2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that a patent shall not be deemed filed in the United States for the purposes of this subsection based on the filing of an international application filed under the treaty defined in section 351(a).

-Claims 1, 11, 14, 15, 20-23, 26, 31, 32, 44, 48, 57, 59-63, 66-69, 71, and 80 are rejected under 35 U.S.C. 102(e) as being anticipated by Kovacs et al. (US 5,833,603)

Kovacs teaches an implantable biosensing transponder, comprising the following structures:

-Excitation source capable of generating radiation, in the form of an optical emitter. (Column 10, lines 28-45)

-Probe, in the form of a dye filled member, in path of radiation, probe contact an analyte, such as tissue, blood, or cerebrospinal fluid. (Column 10, lines 3-28)

-Detector detecting optical property of the probe, for converting detected optical signals to electric signals, in the form of photosensors. (Column 10, line 49)

-Housing with excitation source, probe, and detector in housing, in the form of a glass capsule. (Column 10, lines 24-26)

- Further comprising optics that affects the path of the radiation, as claim 11 discloses, such as a lens (Column 13, line 10-16)
- A processor, as claim 14 discloses. (Column 13, lines 5-15)
- Amplifiers, as claim 15 discloses. (Column 16, line 5)
- A Spectrometer, as claim 18 discloses, with the spectrometer encapsulated in transparent housing, as claim 19 discloses. (Column 12, line 40)
- LED, as claim 20 discloses. (Column 11, lines 43-55)
- Source providing wavelength at 660-800 nm, within 250-1100 nm range, as claim 21 discloses. (Column 11, line 48-50)
- Photodiode and light detection system capable at detecting light at multiple wavelengths, as claims 22 and 23 disclose. (Column 11, line 55-65)
- Catheter, as claim 26 discloses. (Figure 12)

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

- Claims 16, 24, 27-30, 58, 70, 72-74, 87, and 88 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kovacs et al.

Kovacs meets all the claims except that it fails to teach a display, a bandpass filter, and a catheter with lumen. However, it is well known in the art to one having ordinary skill in the art of medical imaging to have a display so one may observe

diagnostic images captured from the system, to have a bandpass filter to filter out unwanted noise, and to have a catheter with lumen to deliver drugs or withdraw analytes.

Allowable Subject Matter

5. Claims 2-10, 12, 13, 17-19 54-56, 65, 75-79, and 81 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

6. Claims 45-47, 49-53, 64, and 82-86 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, second paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

Conclusion

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

-Sun et al. (US 6,122,536) teaches an implantable blood constituent sensor.

-Salb (US 5,408,996) teaches a metabolic optical imager.

-Vo-Dinh (US 5,219,137 B1) teaches a nanoprobe for Raman Spectroscopy.

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jeoyuh Lin whose telephone number is (703) 306-5990. The examiner can normally be reached on m-f, 8:30-6:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Marvin Lateef can be reached on (703) 308-3256. The fax phone numbers

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for the organization where this application or proceeding is assigned are (703) 308-0758 for regular communications and (703) 308-0758 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0858.

JYL

JYL
February 22, 2003

A handwritten signature in black ink, appearing to read 'Mr. Lateef', with a stylized flourish at the end.

Marvin M. Lateef
Supervisory Patent Examiner
Group 3700